

ABSTRACT

An actuator is coupled between a head and a flexure, the actuator providing submicron positioning of the head while reducing undesirable vibrations of the flexure. The actuator includes a stator and a rotor, with a plurality of deformable elements coupled between the stator and the rotor. In one aspect the rotor, stator and deformable elements are constructed so that the rotor has a substantially fixed axis of rotation relative to the stator, and the actuation of a transducer in the head is magnified. In another aspect the rotor is coupled to the head so that the axis of rotation is substantially aligned with the center of mass of the head and rotor, increasing the frequency at which the actuator can move the head and reducing vibrations in the flexure caused by actuation of the head.